

Abstract

The invention relates to a method for logging  
5 messages on a data bus and temporarily storing the sent  
messages in a cyclically overwritable volatile storing  
means. The temporarily stored messages can be examined in  
a targeted manner for attributes of interest by using a  
verification program. A storage of the temporarily stored  
10 messages in a non-volatile second storing means can be  
initiated by means of definable trigger events that, for  
example, are formed from individual or a number of  
attributes of the messages. To this end, the occurrence  
of the defined trigger event is determined by a  
15 monitoring unit, and the data content of the volatile  
storing means are subsequently transferred into the  
storage locations of the non-volatile storing means.

The principal advantage achieved with the above method  
20 resides in the possibility of backtracking the bus  
traffic. The exchanged messages may be backtracked and  
thus provide for the possibility to determine from which  
process and from which control device was the error  
message sent on the bus. This assists in a decisive  
25 manner in the error-seeking in complex communications  
networks. By means of the backtracking of the error  
message or with the analysis as to which message has  
eventually triggered an error in the communications  
network, it may be ascertained which process is  
30 responsible for the error and which program step  
triggered it. The error-seeking in the software

programming of complex control device combinations is  
thereby decisively facilitated.

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